## INFANTRY NEWS



PROBLEMS WITH THE 60-kilowatt tactical quiet generator have led to the production of a video tape, "Operation and Set-up of the 60KW Tactical Generator." The tape was produced through a joint effort of the Combined Arms Command Training Directorate and the U.S. Army Ordnance Center and School.

The purpose of the tape is to provide training to soldiers in the field that will help prevent damage to the generator sets and avoid the cost of repair parts and man-hours.

The tape, TVT 9-312, PIN #710844DA, is available through Armywide distribution.

THE SOLDIER SYSTEM Command recently approved two product improvements conducted under the Soldier Enhancement Program:

Enhanced Tactical Load-Bearing Vest. This vest improves the weight distribution of the soldier's load and reduces the encumbrance of the load-bearing equipment. It also offers more flexibility in carrying fighting load components, which can vary according to the quantity and mix of ammunition, type of weapon, and specific missions requirements. The vest's nylon mesh material allows for better ventilation, thus reducing heat stress and fatigue for the soldier.

Improved Combat Butt Pack. This new pack gives soldiers an efficient way to carry a small sustainment load for short missions and to carry more equipment on the ALICE (all-purpose lightweight individual carrying equipment) rucksack.

Improvements include an ability to attach the standard pistol belt to the ALICE system and the enhanced tactical load-

bearing vest, as well as quick-attachment rings and a quick-release opening. The pack is in a woodland camouflage pattern and has a water resistant lining.

Both items will be phased into the supply system as present stocks are depleted.

A PROTOTYPE OBJECTIVE Individual Combat Weapon (OICW) will be produced under a recently awarded contract. The weapon is one of several advanced technology demonstration efforts in the 21st Century Land Warrior program for the combat soldier of the future.

The combined rifle—using 20mm highexplosive (HE) bursting ammunition and standard NATO 5.56mm kinetic-energy (KE) rounds—will substantially increase engagement range, hit probability, lethality, and survivability for the infantry soldier.

At less than half the weight of comparable systems, OICW has a range three times that of the M203 grenade launcher. Its 24-hour day-night and bursting-munition capabilities provide versatility in all combat environments, including the ability to attack targets in structures and behind obstacles.

Program requirements derived from the Small Arms Master Plan were developed jointly by the Army, Air Force, Navy, Marine Corps, Coast Guard, and Special Forces.

## **BRADLEY CORNER**

After Operation *Desert Storm*, the need for a Bradley 25mm gun barrel with greater accuracy and life expectancy was identified. Barrels were tested at Aberdeen Proving Grounds throughout Fiscal Year 1992.

The 107-pound fluted barrel provided better accuracy and 20 to 30 percent longer life expectancy than the Bradley's 89-pound barrel, but it was also more expensive.

A chrome-plated fluted barrel initially proved to be better. An estimated 10 percent increase in life expectancy over the previous fluted barrel seemed promising. As testing continued, however, the chrome barrel weakened and proved less effective than initially projected. The 107-pound fluted barrel is now the primary BFV barrel.

Ballistic tests have determined that different types of ammunition wear a barrel in different locations, but the Army's current bore gage measures only the breech life of the barrel, not wear along its entire length. The British BG-10 bore gage does measure wear along the entire length, but it had to be modified from the British 30mm gun to fit the Bradley's 25mm barrel. Two systems have been completed and are in the U.S. Army today, one of which is in the 29th Infantry Regiment at Fort Benning. The gage is being tested during range operations, and barrels will be fired during all live-fire tables to obtain an accurate assessment. Enough barrel wear information should be obtained after four or five gunneries, which should be completed in February 1997.